



# Patent Idea Details for Idea #46081

## GENERAL INFORMATION

**Title:** Method for implementing zero down time for Access Servers

**ID:** 46081

**Patent No.:** --, --

**URL:** [Application No. --]

**Inventors:** Prasad Chebrolu (pchebrol)

*More details on these inventors listed below.*

**Date Entered:** 28-Mar-1999

**Date:** 28-Mar-1999

**Modified:**

**Date Filed:** --

**Date Issued:** --

**Background:** The ISP's often need to upgrade their access servers with either new software or install new hardware or replace hardware and hence need to reload/power cycle their access servers. As users/clients are always connected to the access servers even during non-peak hours, reloading the access servers to upgrade the software/hardware, would be a denial to service to the clients. Hence, we need a mechanism to migrate the new users to another access server in the same hunt group. Right now in Cisco IOS, we have no option, but to reload the access servers in order to upgrade the software/hardware, thereby dropping the clients already connected and denying them service for a fairly large amount of time.

**Summary:** In this method, we can implement a mechanism, which will busyout all the available/free channels/timeslots on the T1/T3 (no matter if it is CAS or PRI), so that all the new users will end up going to another known good access server in the same hunt group configured by the ISP. This way we have taken care of the new users being routed to the another access server in the same hunt group. Now, when the users which are already connected, start disconnecting, this algorithm should seize and busyout the corresponding channel/timeslot. As some point of time, all the users on this access server will be disconnected, hence we can upgrade the software/hardware and put the access server back into service.

**Advantages:** There are many advantages for this implementation :

1. Already connected clients will not be disconnected, as it is done now.
2. Zero down time for ISP service, from a end user perspective.
3. We dont need to upgrade during the wee hours of ISP service, the way it is done now, causing some Engineer to monitor the upgrade during that time.

4. This method is particularly useful in high end Access Servers, wherein we cannot afford to have any downtime for such a large client base.

**Cisco Use:** This algorithm can be implemented in any Cisco Access Server such as AS5200/AS5300/AS5800. This has not been implemented on the Cisco Access Servers so far.

**Method of Any Vendor Access Server** should have a value added service, such as this for maintaining zero downtime for ISP service, in order to upgrade Access Servers software/hardware.

**Companies:**

**Previous ---**

**Public Use:**

**First Written ---**

**Record Date:**

**First Written ---**

**Record**

**URLs:**

**Supporting ---**

**Docs URLs:**

**Notes: ---**

**Inventor** Prasad Chebroiu (pchebroi)

*See also Cisco Directory*

**Details:** Work telephone: 408 526-4112

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**Department:** RAPD System Verification

## REVIEW INFORMATION

**Review Progress:**

**Group Name:** NUBU-DIAL

**Users:**

cfadel,jwong,nmajor,rboures,tkempsel,yoko

(Approved)

1 node, 100% complete.

This idea has been approved. The status of this application will not be updated in CPOL until after it has been filed with the US Patent Office. All post-approval information is stored in an off-line database. If you have questions, please use Feedback to contact the patent attorneys.

**Reviewers'**

**Comments:** REASON FOR APPROVAL:

Per the April 28 meeting of the DIAL CPOL committee your patent idea submission has been accepted.

**OTHER NON-CISCO USERS OF THIS INVENTION:**

Any Vendor Access Server should have a value added service, such as this for maintaining zero downtime for ISP service, in order to upgrade Access Servers software/hardware.

**DETECTION OF NON-CISCO USE:**

Brochures, operation manuals, network design materials

**Designated ERROR:** GetNodeMisc: Can't get data! ORA-01722: invalid number (DBD: oexfet Reviewer: error).

**Manager** acra,bakella,chambers,kjkenned,listwin,nmajor,npervaiz

**List:**

**Admin Flags:**

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